Pinnacles

P65/3/985

Official Map and Guide

National Monument
California

National Park Service
U.S. Department of the Interior

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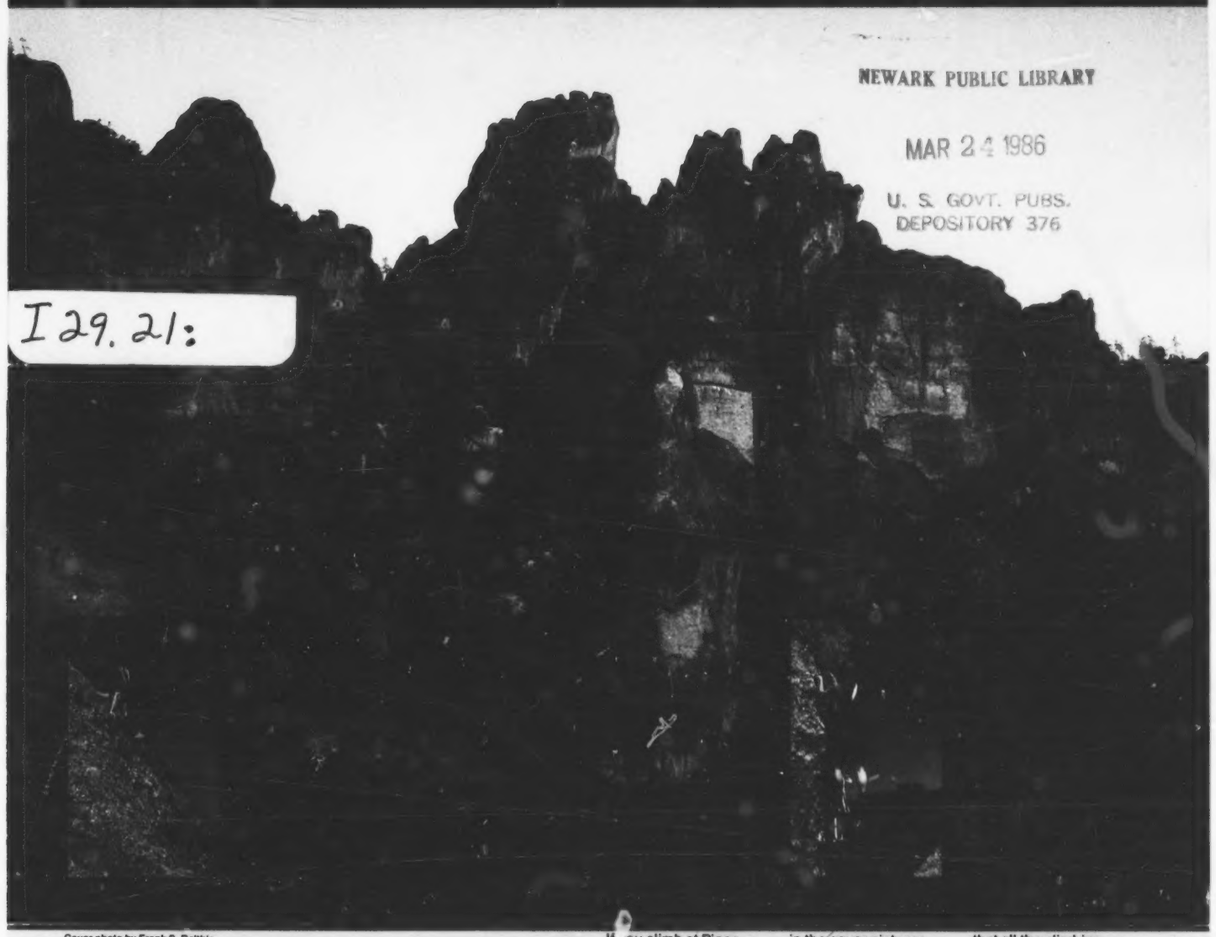

Cover photo by Frank S. Balthis
Small inset photos left and center by Chuck Richards

If you climb at Pinnacles, make sure that you, like the climbers in the cover pictures, are properly equipped. After your climb be sure that all the climbing apparatus is removed from the rocks.

The difference is immediately apparent. You know at once why this park is called Pinnacles. Here you face spires and crags that bear no resemblance to the surrounding smooth, round hills. Abruptly, the pinnacle rock formations dominate the scene.

These rocks are the remains of an ancient volcano. Or rather they are part of the remains, for the rest of this volcano lies 195 miles to the southeast. Sound intriguing? It is all part of the story of the San Andreas Rift Zone, which runs just east of the park, and the geological forces that have shaped the face of the landscape in this part of California for millions of years. It is the story of heat, frost, water, and wind wearing at the rock.

Pinnacles is also the story of the chaparral, of the plants and animals that make up this community. The chaparral and the distinctive geological features are the reasons why Pinnacles was set aside as a national monument by President Theodore Roosevelt on January 16, 1908. The initial development was undertaken by the Civilian Conservation Corps and took place from 1933 through 1942. Many examples of the Corps' work can be found throughout the park today.

Pinnacles is also a place for rejuvenation and enjoyment. People come to hike the many trails that lace the park, climb the sheer rock walls, explore the caves, picnic, and camp. Pinnacles can be enjoyed at any time and at any season, but a favorite time for many is spring when the cool rains of winter turn the trees and shrubs a lush green and a multitude of colorful wildflowers covers the hills. The hot, dry summer turns the green hills to a golden brown. Fall brings quiet and the lowering light of late afternoon. Visit for a day or for as long as you wish to discover Pinnacles' many moods and faces.

A Land in Transition

The San Andreas Rift Zone, a series of faults, lies just east of the park. It was created when the Pacific plate collided with and wrenched off a portion of the North American Plate (see diagram at right). Geologists know that rift zones are likely places for volcanoes to occur, for here the earth's crust is broken, allowing the magma from beneath the surface to well up. The Pinnacles are the result of these two factors at work—an ancient volcano and movement along a rift zone.

The story begins more than 23 million years ago when molten rock poured over the surface of the land through fissures that opened as the two plates ground past one another. As the eruptions grew in intensity the cone being built by the volcanic activity grew until a high steep-sided volcano had been formed. Geologists theorize that this volcanic mountain once stood nearly a mile higher than North Chalone Peak, the highest point in the park today. Yet even as this volcano was being formed, its own destruction was at hand, for the Pacific plate upon which it was located began moving off to the northwest. In time the portion of the volcano whose eroded remnants we now know as the Pinnacles reached its present location, 195 miles beyond its point of origin. All the while, too, erosion was at work carving and breaking down the once mighty peak to about a third of its original height, sculpting the spires and crags you see today. Nor is the geologic process at an end. Millions of years from now what little will be left of this ancient volcano will have moved off to the northwest.

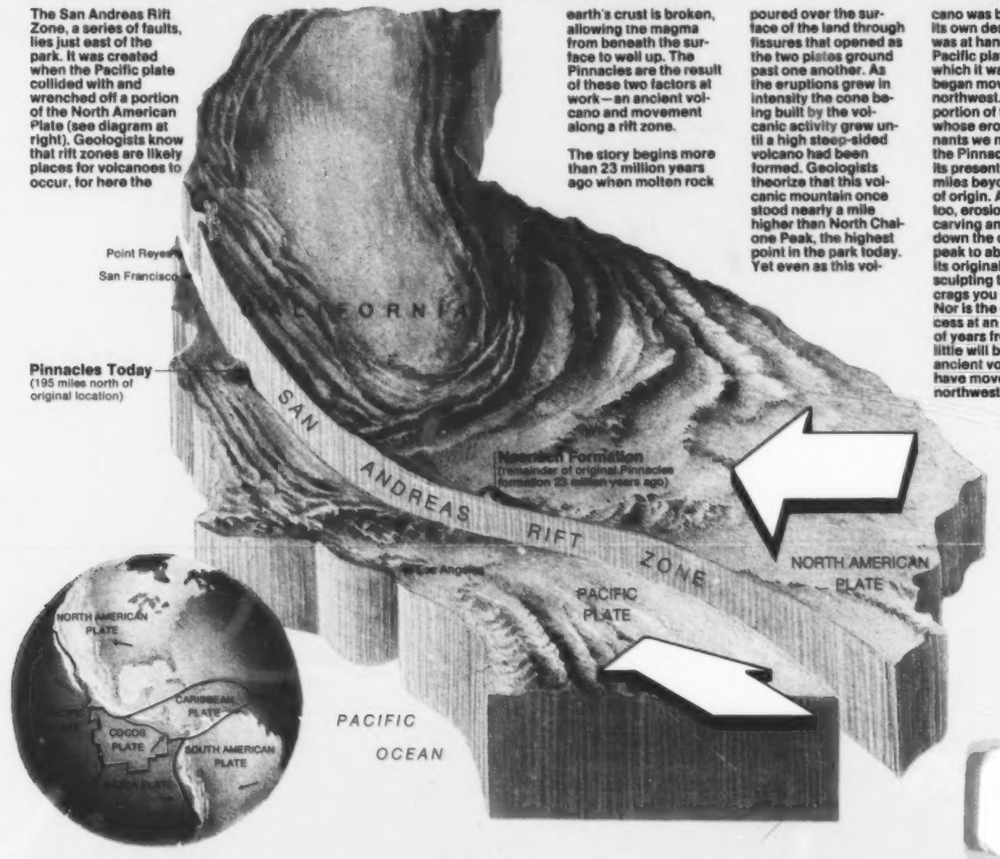

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Plate Tectonics

Geologists have for many years tried to explain why it looks like the eastern coast of South America would neatly fit into the coast of West Africa and why rocks on different continents were the same. Recently the theory of plate tectonics, sometimes called continental drift, has emerged. Basically it says that the Earth's skin is not one single covering as we might expect but is made up of a series of plates (diagram above left). Imagine for a minute that the Earth is like a basketball: the grooves on the ball are like the junctions of the plates. Both Earth and basketball appear to be composed of a single covering. But unlike the basketball, which is one continuous piece, the lighter plates of the Earth's surface float over the heavier interior. Pressures from the interior sometimes force one plate to bump into, pull away from, or move alongside another. Scientists believe that this is what has caused the Pinnacles to make its northward journey.

Illustration by Robert Hynes

Plant and Animal Communities

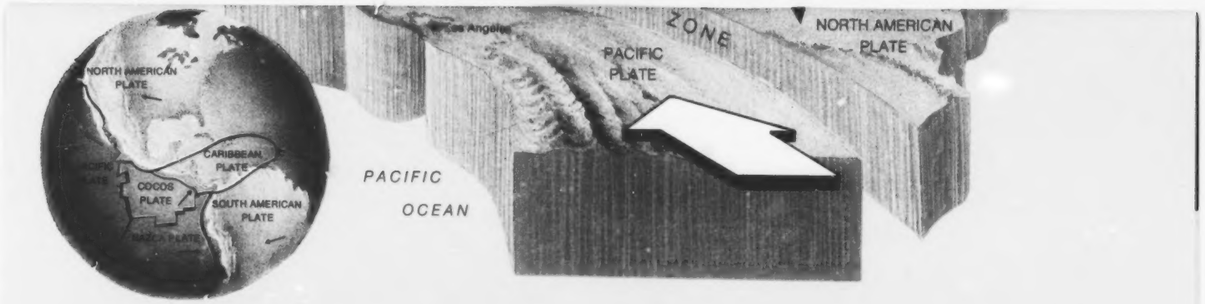

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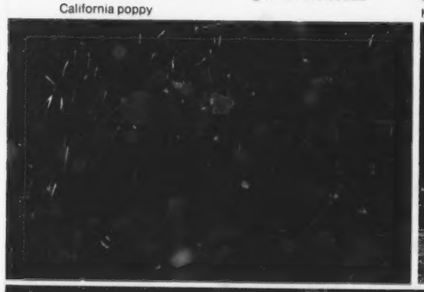
Illustration by Robert Hynes

Plant and Animal Communities

At first glance the slopes of Pinnacles appear covered with dense, uniform brush. A closer look reveals a more complex association of plant communities. Along the watercourses live-oaks, buckeyes, and sycamores grow. Blue oak woodlands and grasslands occur on the deepest soils. Elsewhere, expanses of olive green chamise, buckbrush, and manzanita are broken here and there by patches of low California buckwheat. This is the chaparral. And in the continuation and rejuvenation of this plant community, fire is an important factor. When the dense shrub cover burns, light, nutrients, and water begin working on all the seeds that have laid buried. For some seeds the hard outer protective coats are cracked by the heat and begin germinating even before the soil has completely cooled. Some plants resprout from roots that can survive the heat of fire and appear amid a carpet of wildflowers. As the brush grows it shades out the smaller plants, so that fewer appear each year, but seeds remain dormant in the soil, awaiting the next fire. As these plants have adapted to survive fire, so have they developed ways to survive the long summer drought in these steep, coarse, erodible soils that do not hold water. Plants take advantage of the winter rains, grow rapidly in the spring months, and then lie dormant during the hottest part of the year. Changes in the plant community bring corresponding changes to the animal and bird populations. New growth provides forage for blacktail deer. Rabbits and rodents consume seeds and herbs. Gray fox, bobcats, mountain lions, owls, hawks, snakes, and other predators prey on the smaller animals and birds drawn to the new food supply. Animal populations also run in cycles. When any species becomes too plentiful for its food supply, a period of readjustment sets in, the numbers decline, and the cycle begins again.

California poppy



Meadow in bloom

Owl's clover

Fire in the chaparral

Exploring Pinnacles

Picnickers listen to a ranger.

Steps lead down into a cave.

Hikers can enjoy the view.

Students hike near the reservoir.

The east side of the park is 5 miles off Calif. 25. The west side can be reached from Soledad off U.S. 101. There is NO road connection between the east and west sides. If you are coming from the east, stop first at the visitor center, which contains exhibits and where you can get detailed information about park activities.

HIKING

HIGH PEAKS. Strenuous; steep trail with excellent views; begins at visitor center, ends at Chalone Creek; 5 miles.

CONDOR GULCH. Strenuous; begins at visitor center; good views of pinnacles; connects with High Peaks; 1.7 miles.

MOSES SPRING/BEAR GULCH CAVES. Moderate; leads from visitor center to reservoir passing over caves or through caves; self-guiding; 1 mile.

CHALONE PEAK. Strenuous; long climb from reservoir to the highest point in the park; vistas from peak; for hardy climbers; 3.3 miles.

BEAR GULCH. Moderate; access between visitor center and Chalone Creek; pleasant shaded walk along canyon bottom; self-guiding; 1.2 miles.

BENCH TRAIL. Easy; access to park facilities from Pinnacles Campground, Inc., via Chalone Creek; 1.3 miles.

OLD PINNACLES. Easy; access between Chalone Creek and Balconies Cliffs along canyon bottom; easy route across park via Balconies trail; 2.3 miles.

BALCONIES TRAIL. Moderate; access between Chaparral Campground and Balconies cliffs and caves; good overall examples of park features; self-guiding; 1.4 miles.

JUNIPER CANYON. Strenuous; access from Chaparral ranger station to High Peaks via Tunnel Trail to Scout Peak or Hawkins Peak; excellent views; 1.8 miles.

TUNNEL TRAIL. Moderate; 1.2 miles connects Juniper Canyon Trail with High Peaks Trail at Hawkins Peak junction or Scout Peak junction. With High Peaks segment creates a 1.9-mile loop through the peaks; excellent views.

NORTH WILDERNESS. Very strenuous; connects Chaparral Campground with North Fork of Chalone Creek; unmaintained; for experienced hikers only; 7.6 miles.

Further Information

For more details write: Superintendent, Pinnacles National Monument, Paicines, CA 95043.

INFORMATION AND SAFETY

Keep in mind that hazards exist here that you may not find elsewhere. Stay alert and use commonsense. ☐Stay on established trails. Shortcutting causes severe erosion, and slips or falls can result from poor footing. ☐Caves have low ceilings and very slippery rocks. Use flashlights. Caves can be dangerous when flooded. Check for and obey all closures. ☐Drink water only from fountains on the park water supply. Carry an adequate supply when hiking. ☐Shield yourself from the sun or rain by wearing protective clothing and a hat. ☐Technical rock climbing is only for the trained and properly equipped. Many rock faces are unstable and likely to flake off beneath you, so register your climb beforehand. ☐Be alert for poison oak. ☐Obey posted speed limits and watch for people and wildlife on the roads. ☐Hunting is prohibited. ☐Do not feed or harm wildlife, and stay a safe distance away. Even rattlesnakes are harmless when given room and left alone. ☐Accessible to the handicapped are the Bear Gulch Visitor Center, picnic area, and restrooms; the Chalone picnic area, and the Chaparral ranger station, restrooms, and campground. Information on accessibility of trails and facilities is at the visitor center.

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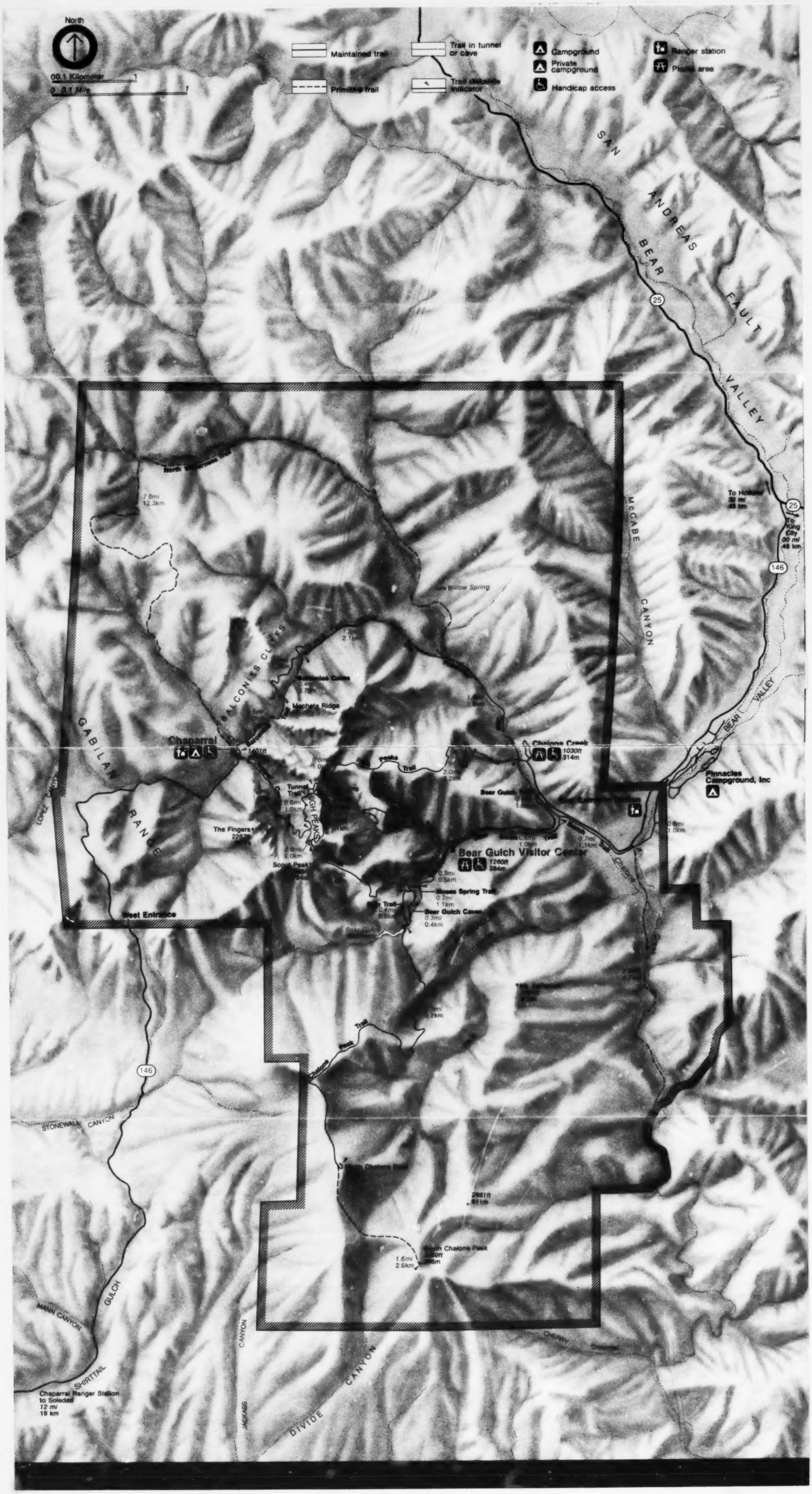
North
0 0.1 Kilometer
0 0.1 Mile
Maintained trail
Primitive trail
Trail in tunnel or cave
Trail distance indicator
Campground
Private campground
Handicap access
Ranger station
Picnic area
SAN ANDREAS FAULT
BEAR VALLEY
McCABE CANYON
25
146
Chaparral
1401ft
427m
Chalone Creek
1030ft
314m
Pinnacles Campground, Inc
Bear Gulch Visitor Center
1260ft
384m
Bear Gulch Cave
Moses Spring Trail
Tunnel Trail
High Peaks Trail
The Fingers
2260ft
689m
West Entrance
Condor Gulch Trail
Chalone Peak Trail
2661ft
811m
Peak Chalone Peak
3304ft
1007m
1.6mi
2.6km
GABILAN RANGE
MACONES CLIFFS
STONEWALL CANYON
MAIN GULCH
SHIRTTAIL CANYON
JACKASS CANYON
DIVIDE CANYON
Chaparral Ranger Station to Soledad
12 mi
19 km
To Hollister
25 mi
40 km
To King City
60 mi
96 km